DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-014460 Address: 333 Burma Road **Date Inspected:** 28-May-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Zhou Cheng. **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance Inspector (QA) Shailesh Wadkar was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

Outside Yard:

CB11, CB12, CB13 & CB16:

This QA Inspector observed that no significant work was being performed on the above mentioned CB's at the time when this QA was present.

CB14:

This QA Inspector observed the following work in progress:

Repair welding of weld joint nos: FB204-041-069 & FB204-043-066. Welder was identified as 055564. Welding process was identified as Flux Cored Arc Welding (FCAW). ZPMC Quality Control (QC) is identified as Guo Yuan Ting. The welding variables (for the respective welds) recorded by QC appeared to comply with the Applicable WPS: WPS-345-FCAW-2G(2F)-repair & WPS-345-FCAW-3G(3F)-repair [welding repair report (WRR) no: B-WR13019 Rev-0 & B-WR13031 Rev-0].

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Trial Assembly:

CB7, CB8, CB9 & CB10:

This QA Inspector observed that no significant work was being performed on this CB at the time when this QA was present.

Bay 19:

This QA Inspector observed the following work in progress:

Repair welding of weld joint SB015-064-008 (for OBG component Suspender Bracket SB64E). Welder is identified as 062749. Welding process was identified as FCAW. ZPMC QC is identified as Zhong Cheng. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-345-FCAW-2G(2F)-repair [welding repair report (WRR) no: B-WR13151 Rev-0 Dt: 05/21/10].

During random inprocess visual inspection, this QA Inspector observed the following:

- Weld buttering being performed at the leading edge of an intended tight fit joint, between the end diaphragm plate (BKX11D) and the bearing plate (BKPL7B).
- The welding process being utilized during the repair welding was Gas Tungsten Arc Welding (GTAW).
- The welder is identified as ZP09-1381.
- The above mentioned welder & the welding process, both are not approved.
- Also, ZPMC QC, Mr. Zhou Cheng was unable to identify the consumables used at the time of welding.
- This QA Inspector discussed this issue with ZPMC QC, Mr. Zhou Cheng that they did not appear to comply with the Contract documents and an incident report would be raised. ABF QA was identified as Mr. Zeng Wen Jun.
- Bike Path: BK004A-004 is located in Bay 19.
- For details, refer attached photos.

Notification No: 005848.

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% of an area that has been previously tested and accepted by ZPMC QC personnel. This QA Inspector has generated MT report for this date. The member(s) are identified as OBG component – Bottom Panel. The weld designations reviewed are as follows:

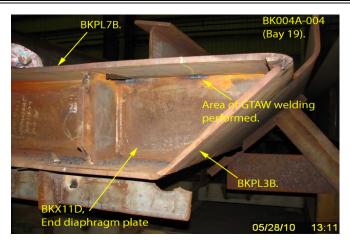
1) BP3018-001-049, 052, 053, 012, 014, 015, 020, 021, 022 & 023.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang; phone: 15000422372., who represents the Office of Structural Materials for your project.

Inspected By:	Wadkar,Sailesh	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer